STIC
Search

Lucas 10/007,613

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     (FILE 'CAPLUS' ENTERED AT 11:31:34 ON 20 OCT 2003)
               DEL HIS Y

     FILE 'REGISTRY' ENTERED AT 11:33:42 ON 20 OCT 2003
               E KERATINASE/CN
L1             1 S E3

     FILE 'HCAPLUS' ENTERED AT 11:34:02 ON 20 OCT 2003
L2           238 S L1
L3           246 S L2 OR KERATINASE
L4         23581 S  MEDICAL GOOD# OR SURGICAL (L) INSTRUMENT?
L5             2 S L3 AND L4
L6          6074 S CUTLERY OR UTENSIL# OR (LAB OR LABORATORY ) (L) (WARE OR EQUI
L7             1 S L6 AND L3
L8        110283 S CABLE OR CENTRIFUG? OR CONTAINER? OR KNIVE? OR PUNCH? OR SAW#
L9             1 S L8 AND L3
L10            2 S L5 OR L7 OR L9
L11        89655 S STERILIZ? OR DISINFECT?
L12       104617 S HEATING
L13       193702 S L11  OR L12
L14         2741 S L13 (L) (L4 OR L6 OR L8)
L15            2 S L14 AND L3
L16            0 S ENZYMATIC (L) L14
L17          660 S ENZYM? (L) L13
L18          269 S ENZYMIC AND L13
L19       138213 S L4 OR L6 OR L8
L20         1840 S L19 (L) L11
L21            2 S L20 AND L3
L22           22 S L20 AND (ENZYM?)
L23        41208 S ENZYM? (L) (TREAT? OR DEGRA? OR HYDROL?)
L24            4 S L22 AND L23
L25            5 S L24 OR L21 OR L15
L26            2 S PROTEOLY? (L) L20
L27            6 S L25 OR L26
L28          926 S L19 (L) HEATING
L29            1 S L28 AND L3
L30        63886 S L23 OR PROTEOLY?
L31            2 S L30 AND L28
L32            7 S L31 OR L29 OR L27
L33       149369 S PROTEINASE OR TRYPSIN? OR CHYMOTYP? OR PEPSIN? OR CHYMOSIN? O
L34           15 S L33 AND  L20
L35        93482 S L33 NOT COLLAGEN#
L36        95121 S L35 OR COLLAGENASE?
L37            7 S L36 AND L20
L38        18620 S ENDOPEPTIDAS? OR PEPTIDASE?  OR THERMOLYSIN? OR BACILLOLYSIN?
L39            4 S L38 AND L20
L40        10440 S CARBONYL HYDROLASE? OR PAPAIN OR PANCREATIN OR STREPTOKINASE?
L41            4 S L20 AND L40
L42           10 S L41 OR L39 OR L37
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=> fil reg
FILE 'REGISTRY' ENTERED AT 12:15:20 ON 20 OCT 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   19 OCT 2003  HIGHEST RN 606921-26-0
DICTIONARY FILE UPDATES:  19 OCT 2003  HIGHEST RN 606921-26-0

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d que l1
L1             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  KERATINASE/CN


=> d l1

L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2003 ACS on STN
RN   37341-53-0  REGISTRY
CN   Keratinase (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   E.C. 3.4.4.25
CN   E.C. 3.4.99.11
CN   E.C. 3.4.99.12
AR   9025-41-6
DR   37237-59-5, 37288-91-8
MF   Unspecified
CI   MAN
LC   STN Files:   AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CIN,
       EMBASE, IFICDB, IFIPAT, IFIUDB, PROMT, TOXCENTER, USPAT2, USPATFULL,
       VETU

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
             224 REFERENCES IN FILE CA (1907 TO DATE)
               7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             224 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 12:15:24 ON 20 OCT 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
```

FILE COVERS 1907 - 20 Oct 2003 VOL 139 ISS 17
FILE LAST UPDATED: 19 Oct 2003 (20031019/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d his

(FILE 'CAPLUS' ENTERED AT 11:31:34 ON 20 OCT 2003)
DEL HIS Y

FILE 'REGISTRY' ENTERED AT 11:33:42 ON 20 OCT 2003
E KERATINASE/CN
L1 1 S E3

FILE 'HCAPLUS' ENTERED AT 11:34:02 ON 20 OCT 2003
L2 238 S L1
L3 246 S L2 OR KERATINASE
L4 23581 S MEDICAL GOOD# OR SURGICAL (L) INSTRUMENT?
L5 2 S L3 AND L4
L6 6074 S CUTLERY OR UTENSIL# OR (LAB OR LABORATORY) (L) (WARE OR EQUI
L7 1 S L6 AND L3
L8 110283 S CABLE OR CENTRIFUG? OR CONTAINER? OR KNIVE? OR PUNCH? OR SAW#
L9 1 S L8 AND L3
L10 2 S L5 OR L7 OR L9
L11 89655 S STERILIZ? OR DISINFECT?
L12 104617 S HEATING
L13 193702 S L11 OR L12
L14 2741 S L13 (L) (L4 OR L6 OR L8)
L15 2 S L14 AND L3
L16 0 S ENZYMATIC (L) L14
L17 660 S ENZYM? (L) L13
L18 269 S ENZYMIC AND L13
L19 138213 S L4 OR L6 OR L8
L20 1840 S L19 (L) L11
L21 2 S L20 AND L3
L22 22 S L20 AND (ENZYM?)
L23 41208 S ENZYM? (L) (TREAT? OR DEGRA? OR HYDROL?)
L24 4 S L22 AND L23
L25 5 S L24 OR L21 OR L15
L26 2 S PROTEOLY? (L) L20
L27 6 S L25 OR L26
L28 926 S L19 (L) HEATING
L29 1 S L28 AND L3
L30 63886 S L23 OR PROTEOLY?
L31 2 S L30 AND L28
L32 7 S L31 OR L29 OR L27
L33 149369 S PROTEINASE OR TRYPSIN? OR CHYMOTYP? OR PEPSIN? OR CHYMOSIN? O
L34 15 S L33 AND L20

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L35        93482 S L33 NOT COLLAGEN#
L36        95121 S L35 OR COLLAGENASE?
L37            7 S L36 AND L20
L38        18620 S ENDOPEPTIDAS? OR PEPTIDASE?  OR THERMOLYSIN? OR BACILLOLYSIN?
L39            4 S L38 AND L20
L40        10440 S CARBONYL HYDROLASE? OR PAPAIN OR PANCREATIN OR STREPTOKINASE?
L41            4 S L20 AND L40
L42           10 S L41 OR L39 OR L37

     FILE 'REGISTRY' ENTERED AT 12:15:20 ON 20 OCT 2003

     FILE 'HCAPLUS' ENTERED AT 12:15:24 ON 20 OCT 2003

=> d que l42
L4         23581 SEA FILE=HCAPLUS ABB=ON  PLU=ON  MEDICAL GOOD#/OBI OR SURGICAL/
                 OBI (L) INSTRUMENT?/OBI
L6          6074 SEA FILE=HCAPLUS ABB=ON  PLU=ON  CUTLERY/OBI OR UTENSIL#/OBI
                 OR (LAB/OBI OR LABORATORY/OBI ) (L) (WARE/OBI OR EQUIP?/OBI)
L8        110283 SEA FILE=HCAPLUS ABB=ON  PLU=ON  CABLE/OBI OR CENTRIFUG?/OBI
                 OR CONTAINER?/OBI OR KNIVE?/OBI OR PUNCH?/OBI OR SAW#/OBI
L11        89655 SEA FILE=HCAPLUS ABB=ON  PLU=ON  STERILIZ?/OBI OR DISINFECT?/OB
                 I
L19       138213 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 OR L6 OR L8
L20         1840 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L19 (L) L11
L33       149369 SEA FILE=HCAPLUS ABB=ON  PLU=ON  PROTEINASE/OBI OR TRYPSIN?/OBI
                  OR CHYMOTYP?/OBI OR PEPSIN?/OBI OR CHYMOSIN?/OBI OR CATHEPSIN?
                 /OBI OR SUBTILISN?/OBI OR ELASTAS?/OBI OR COLLAGEN?/OBI
L35        93482 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L33 NOT COLLAGEN#/OBI
L36        95121 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L35 OR COLLAGENASE?/OBI
L37            7 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 AND L20
L38        18620 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ENDOPEPTIDAS?/OBI OR PEPTIDASE
                 ?/OBI  OR THERMOLYSIN?/OBI OR BACILLOLYSIN?/OBI OR MYCILYSIN?/O
                 BI OR CARBOXYPEPTIDASE?/OBI OR AMINO PEPTIDASE?/OBI
L39            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L38 AND L20
L40        10440 SEA FILE=HCAPLUS ABB=ON  PLU=ON  CARBONYL HYDROLASE?/OBI OR
                 PAPAIN/OBI OR PANCREATIN/OBI OR STREPTOKINASE?/OBI OR STREPTODO
                 RNASE/OBI OR FICIN/OBI OR CHYMOPAPAIN/OBI OR BROMELIN/OBI
L41            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L20 AND L40
L42           10 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L41 OR L39 OR L37


=> d .ca 1-10 l42

L42  ANSWER 1 OF 10  HCAPLUS  COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:         2003:133123  HCAPLUS
DOCUMENT NUMBER:          138:175939
TITLE:                    Disinfecting and cleansing system for contact lenses
INVENTOR(S):              Mowrey-McKee, Mary Flowers; Sills, Marzenna Alicja
PATENT ASSIGNEE(S):       Novartis AG, Switz.; Novartis Pharma G.m.b.H.
SOURCE:                   PCT Int. Appl., 28 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     WO 2003013621      A1   20030220       WO 2002-EP8839   20020807
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
```

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR

US 2003118472 A1 20030626 US 2002-210808 20020731
PRIORITY APPLN. INFO.: US 2001-310893P P 20010808
OTHER SOURCE(S): MARPAT 138:175939

AB A system and a method for disinfecting and cleaning ophthalmic devices such as contact lenses is provided. The system involves the use of an active microbicidal soln. generated just prior to use by the reaction of an iodide salt with hydrogen peroxide in the presence of a peroxidase. Such a system is particularly useful for disinfecting contact lenses. Tablets were prepd. from horseradish peroxidase 300.0, subtilisin 8.0, lipase 2.0, sodium benzoate 7.4, KI 0.3, lactose monohydrate 63.0, citric acid 33.0, and K2CO3 47.0 mg/tablet.

IC ICM A61L012-08
ICS A61L012-10; A61L012-12; A61L002-16; A61L002-18; A61L002-23; C11D003-00; A61K009-00

CC 63-7 (Pharmaceuticals)

IT Buffers
Contact lenses
Disinfectants
Medical goods
Reducing agents
Stabilizing agents
(**disinfecting** and cleansing system for contact lenses)

IT 124-43-6 288-32-4, Imidazole, biological studies 1313-60-6, Sodium peroxide 7631-90-5, Sodium hydrogen sulfite 7632-04-4, Sodium perborate 7681-11-0, Potassium iodide, biological studies 7722-84-1, Hydrogen peroxide, biological studies 7757-83-7, Sodium sulfite 7772-98-7, Sodium thiosulfate 9000-92-4, Amylase 9001-62-1, Lipase 9001-92-7, Protease 9002-07-7, **Trypsin** 9003-99-0, Peroxidase 9014-01-1, Subtilisin 10486-00-7, Sodium perborate tetrahydrate 11130-11-3 15827-60-8, Dequest 2060 20461-54-5, Iodide, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(disinfecting and cleansing system for contact lenses)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:965014 HCAPLUS
DOCUMENT NUMBER: 138:29227
TITLE: Method and composition for **sterilizing surgical instruments** comprising heating and proteolytic enzymes
INVENTOR(S): Shih, Jason C. H.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 7 pp., Cont.-in-part of U.S. Ser. No. 834,284.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 2002192731	A1	20021219	US 2001-7613	20011026
US 2002172989	A1	20021121	US 2001-834284	20010412
US 6613505	B2	20030902		
WO 2002083082	A2	20021024	WO 2002-US8982	20020322
WO 2002083082	A3	20030717		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-834284 A2 20010412
US 2001-7613 A 20011026

AB A method and compn. for sterilizing articles that are contaminated with infectious prion protein, such as surgical instruments, kitchen utensils, lab. tools, etc., comprising the steps of: (a) heating the articles to be treated at a moderate temp. well below the incineration temp. of said infectious prion protein, wherein said moderate temp. is sufficient to enhance the proteolytic susceptibility of infective prion protein assocd. with said articles; and (b) exposing the heated articles to a proteolytic enzyme that is effective for at least partial redn. of the infective protein prion assocd. with said articles under said moderate temp.

IC ICM G01N033-53
ICS G01N033-537; G01N033-543; C11D001-00; G01N033-569; C12Q001-02; C12Q001-22; C12Q001-18; C12Q001-04; C12N015-09; C07F001-00; C07K001-00; C07H001-00; C07J001-00; C07C001-00; C07D201-00

NCL 435007920; 510161000; 435262000; 435031000; 435032000; 435029000; 435007220; 435069200; 435034000

CC 63-8 (Pharmaceuticals)

ST **sterilization surgical instrument** heating proteolytic enzyme

IT Prion proteins
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(PrPSc; method and compn. for **sterilizing surgical instruments** comprising heating and proteolytic enzymes)

IT Materials processing
(applicators; method and compn. for **sterilizing surgical instruments** comprising heating and proteolytic enzymes)

IT **Medical goods**
(cannulas; method and compn. for **sterilizing surgical instruments** comprising heating and proteolytic enzymes)

IT Fasteners
(clamps; method and compn. for **sterilizing surgical instruments** comprising heating and proteolytic enzymes)

IT Electrodes
(coagulation; method and compn. for **sterilizing surgical instruments** comprising heating and proteolytic enzymes)

IT Buffers
Cables (mechanical)
Centrifuges
Containers
Detergent builders
Detergents
Fillers

Filters
Fluorometers
Heating
Knives
Punches
Saws
Spectrometers
Sterilization and **Disinfection**
Surfactants
Temperature
Waters
(method and compn. for **sterilizing surgical instruments** comprising heating and proteolytic enzymes)

IT 64-17-5, Alcohol, biological studies 8049-47-6, **Pancreatin** 9001-00-7, **Bromelin** 9001-09-6, **Chymopapain** 9001-12-1, **Collagenase** 9001-33-6, **Ficin** 9001-61-0, Leucyl aminopeptidase 9001-73-4, **Papain** 9001-75-6, **Pepsin** 9001-92-7, Proteolytic enzyme 9001-98-3, **Chymosin** 9002-01-1, **Streptokinase** 9002-07-7, **Trypsin** 9004-06-2, **Elastase** 9004-07-3, Chymotrypsin 9004-08-4, **Cathepsin** 9014-01-1, Subtilisin 9031-94-1, Aminopeptidase 9031-96-3, **Peptidase** 9031-98-5, **Carboxypeptidase** 9073-78-3, **Thermolysin** 9080-56-2, **Bacillolysin** 37340-82-2, **Streptodornase** 37341-53-0, Keratinase 39450-01-6 110639-28-6, Oligopeptidase
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(method and compn. for **sterilizing surgical instruments** comprising heating and proteolytic enzymes)

L42 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:813887 HCAPLUS
DOCUMENT NUMBER: 137:316147
TITLE: Composition and method for destruction of infectious prion proteins
INVENTOR(S): Shih, Jason C. H.
PATENT ASSIGNEE(S): Bioresource International, Inc., USA
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002083082	A2	20021024	WO 2002-US8982	20020322
WO 2002083082	A3	20030717		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002172989	A1	20021121	US 2001-834284	20010412
US 6613505	B2	20030902		
US 2002192731	A1	20021219	US 2001-7613	20011026

PRIORITY APPLN. INFO.: US 2001-834284 A 20010412
US 2001-7613 A 20011026

AB A method and compn. for destruction of infectious prion proteins assocd. with transmissible spongiform encephalopathy (TSE) and/or other prion protein-mediated diseases, by thermal/enzymic treatment of the infectious prion proteins with a prion-destructive protease. The method and compn. are applicable to treatment of tissue contg. or contaminated with infectious prion protein strains, or disinfection or sterilization of prion-contaminated articles, such as surgical instruments, kitchen utensils, lab. tools, etc.

IC ICM A61K

CC 63-8 (Pharmaceuticals)
Section cross-reference(s): 9, 17

ST prion protein protease heat treatment **sterilization**; animal tissue **sterilization** protease heat treatment; **medical good sterilization** protease heat treatment; kitchen **utensil sterilization** protease heat treatment; **lab ware sterilization** protease heat treatment

IT Household furnishings
(**cutlery**; thermal/enzymic treatment for destruction of infectious prion proteins and **disinfection**)

IT Medical equipment
(**instruments, surgical**; thermal/enzymic treatment for destruction of infectious prion proteins and **disinfection**)

IT Cooking **utensils**
Laboratory ware
Medical goods
(thermal/enzymic treatment for destruction of infectious prion proteins and **disinfection**)

IT 9001-92-7, **Proteinase**
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**Mycilysin**; thermal/enzymic treatment for destruction of infectious prion proteins)

IT 8049-47-6, **Pancreatin** 9001-00-7, **Bromelin**
9001-09-6, **Chymopapain** 9001-12-1, **Collagenase**
9001-33-6, **Ficin** 9001-61-0, Leucyl aminopeptidase 9001-73-4, **Papain** 9001-75-6, **Pepsin** 9001-98-3, **Chymosin**
9002-01-1, **Streptokinase** 9002-07-7, **Trypsin**
9004-06-2, **Elastase** 9004-07-3, Chymotrypsin 9004-08-4, **Cathepsin** 9014-01-1, Subtilisin 9031-94-1, Aminopeptidase
9031-96-3, **Peptidase** 9031-98-5, **Carboxypeptidase**
9073-78-3, **Thermolysin** 9080-56-2, **Bacillolysin**
37340-82-2, **Streptodornase** 37341-53-0, Keratinase
39450-01-6, **Proteinase** K 110639-28-6, Oligopeptidase
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(thermal/enzymic treatment for destruction of infectious prion proteins)

L42 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:465812 HCAPLUS
DOCUMENT NUMBER: 137:44155
TITLE: Regulation of bacterial virulence
INVENTOR(S): Kjellberg, Staffan; Rice, Scott; McDougald, Diane
PATENT ASSIGNEE(S): Unisearch Limited, Australia
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002047681	A1	20020620	WO 2001-AU1621	20011214

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002020378	A5	20020624	AU 2002-20378	20011214

PRIORITY APPLN. INFO.: AU 2000-2090 A 20001214
WO 2001-AU1621 W 20011214

OTHER SOURCE(S): MARPAT 137:44155

AB The present invention relates to methods of inhibiting virulence in organisms with an AI-2 system using furanones and related compds. These methods represent a novel mechanism for controlling disease causing organisms.

IC ICM A61K031-365
ICS A61K031-366; A61K031-121; A61K031-19; A61P031-04

CC 10-5 (Microbial, Algal, and Fungal Biochemistry)
Section cross-reference(s): 1, 62, 63

IT **Medical goods**
(bandages, **disinfectant**-contg.; regulation of bacterial virulence by inhibiting AI-2 signaling pathway using furanones and related compds.)

IT **Medical goods**
(catheters, **disinfection** of; regulation of bacterial virulence by inhibiting AI-2 signaling pathway using furanones and related compds.)

IT **Medical goods**
(dressings, **disinfectant**-contg.; regulation of bacterial virulence by inhibiting AI-2 signaling pathway using furanones and related compds.)

IT **Medical goods**
(indwelling, **disinfection** of; regulation of bacterial virulence by inhibiting AI-2 signaling pathway using furanones and related compds.)

IT **Medical goods**
(orthopedic, **disinfection** of; regulation of bacterial virulence by inhibiting AI-2 signaling pathway using furanones and related compds.)

IT **Medical goods**
(tampons, **disinfectant**-contg.; regulation of bacterial virulence by inhibiting AI-2 signaling pathway using furanones and related compds.)

IT 9031-96-3, **Peptidase**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prodn., virulence factor; regulation of bacterial virulence by inhibiting AI-2 signaling pathway using furanones and related compds.)

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:772850 HCAPLUS
DOCUMENT NUMBER: 133:340295
TITLE: Biological indicators for validating a prion sterilization process
INVENTOR(S): Belhumeur, Pierre; Julien, Karine; Tabrizian, Maryam; Yahia, L'Hocine; Marchand, Richard
PATENT ASSIGNEE(S): Universite de Montreal, Can.
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000065344	A2	20001102	WO 2000-CA446	20000420
WO 2000065344	A3	20010222		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
BR 2000010007	A	20020115	BR 2000-10007	20000420
EP 1173603	A2	20020123	EP 2000-922360	20000420
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002542775	T2	20021217	JP 2000-614033	20000420
NZ 514929	A	20021220	NZ 2000-514929	20000420
ZA 2001008328	A	20021010	ZA 2001-8328	20011010

PRIORITY APPLN. INFO.:	US 1999-130945P	P	19990426
	WO 2000-CA446	W	20000420

AB The present invention relates to a method of evaluating the efficiency of sterilization processes by measurement of degrdn. levels of prion protein indicators. When exposed to sterilization conditions, prion indicators are degraded in a manner to proportionally indicate the level of degrdn. of prion proteins themselves on medical devices or other surfaces usable in surgery and health cares.

IC ICM G01N033-48
CC 63-7 (Pharmaceuticals)
IT Composites
Medical goods
Medical goods
(**containers**; biol. indicators for validating a prion **sterilization** process)
IT Alloys, biological studies
Borosilicate glasses
Metals, biological studies
Polymers, biological studies
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**containers**; biol. indicators for validating a prion **sterilization** process)
IT **Containers**
(glass; biol. indicators for validating a prion **sterilization**

process)
IT **Containers**
Containers
(medical; biol. indicators for validating a prion **sterilization** process)
IT **Containers**
(paper; biol. indicators for validating a prion **sterilization** process)
IT 9001-92-7, **Proteinase**
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(digestion by; biol. indicators for validating a prion sterilization process)

L42 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:427716 HCAPLUS
DOCUMENT NUMBER: 133:64099
TITLE: Cleaning of medical goods using **proteinase** and apparatus for the method
INVENTOR(S): Shibata, Koichi
PATENT ASSIGNEE(S): Yokokawa Denshi Denki K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000176389	A2	20000627	JP 1998-358271	19981216

PRIORITY APPLN. INFO.: JP 1998-358271 19981216

AB Medical goods such as clamps, scalpels, etc., are cleaned by (1) prewashing them upon soaking in a detergent contg. proteinase , (2) washing the surface of them while jetting warm water, (3) pouring hot water onto them for sterilization, and then (4) drying them with warm air. The prewashing step is preferably performed under stirring and the detergent is preferably a neutral detergent kept at 35-48.degree.. Also claimed is a cleaning app. having a basket receiving the medical goods. This method can remove proteinaceous soil in narrow spaces such as a hinge part of a clamp and has no risk of breaking a tip of scalpels, etc.
IC ICM B08B003-08
ICS B08B003-02
CC 63-8 (Pharmaceuticals)
ST medical good cleaning prewashing neutral detergent **proteinase**
IT Cleaning
(app.; cleaning of medical goods including prewashing step by soaking in warm neutral detergent contg. **proteinase**)
IT Medical goods
(cleaning of medical goods including prewashing step by soaking in warm neutral detergent contg. **proteinase**)
IT **Sterilization** and **Disinfection**
(hot water; cleaning of **medical goods** including prewashing step by soaking in warm neutral detergent contg. **proteinase**)
IT Detergents
(nonionic; cleaning of medical goods including prewashing step by soaking in warm neutral detergent contg. **proteinase**)
IT 9001-92-7, **Proteinase**
RL: TEM (Technical or engineered material use); USES (Uses)
(cleaning of medical goods including prewashing step by soaking in warm

neutral detergent contg. **proteinase**)

L42 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:297912 HCAPLUS
DOCUMENT NUMBER: 133:48852
TITLE: Irradiation effects on hydrases for biomedical applications
AUTHOR(S): Furuta, Masakazu; Ohashi, Isao; Oka, Masahito; Hayashi, Toshio
CORPORATE SOURCE: Research Institute for Advanced Science and Technology, Osaka Prefecture University, Osaka, 599-8570, Japan
SOURCE: Radiation Physics and Chemistry (2000), 57(3-6), 455-457
CODEN: RPCHDM; ISSN: 0969-806X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To apply an irradn. technique to sterilize "Hybrid" biomedical materials including enzymes, we selected papain, a well-characterized plant endopeptidase as a model to examine durability of enzyme activity under the practical irradn. condition in which limited data were available for irradn. inactivation of enzymes. Dry powder and frozen aq. soln. of papain showed significant durability against 60Co-gamma irradn. suggesting that, the com. irradn. sterilizing method is applicable without modification. Although irradn. of unfrozen aq. papain soln. showed an unusual change of the enzymic activity with the increasing doses, and was totally inactivated at 15 kGy, we managed to keep the residual activity more than 50% of initial activity after 3-kGy irradn., taking such optimum conditions as increasing enzyme concn. from 10 to 100 mg/mL and purging with N2 gas to suppress the formation of free radicals.
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 7
ST hydrase **medical good sterilization** gamma irradn; **papain medical good sterilization** gamma irradn
IT 9001-73-4, **Papain**
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(irradn. effects on hydrases for biomedical applications)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:151267 HCAPLUS
DOCUMENT NUMBER: 128:202705
TITLE: Method and test kit for pretreatment of surfaces of medical goods and other biofilm-acquiring objects
INVENTOR(S): Tuompo, Helena; Wirtanen, Gun; Salo, Satu; Scheinin, Leena; Batsman, Ari; Levo, Seija
PATENT ASSIGNEE(S): Orion-Yhtyma Oy Orion Diagnostica, Finland; Tuompo, Helena; Wirtanen, Gun; Salo, Satu; Scheinin, Leena; Batsman, Ari; Levo, Seija
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9807883	A1	19980226	WO 1997-FI481	19970818
W: JP, NO, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FI 9603235	A	19980217	FI 1996-3235	19960816
EP 879295	A1	19981125	EP 1997-936705	19970818
R: AT, BE, CH, DE, DK, FR, GB, IT, LI, NL, SE, IE, FI				
JP 11513901	T2	19991130	JP 1997-510451	19970818
US 5910420	A	19990608	US 1998-54822	19980403
NO 9801691	A	19980415	NO 1998-1691	19980415

PRIORITY APPLN. INFO.: FI 1996-3235 19960816
WO 1997-FI481 19970818

AB The invention concerns a new method for removing biofilm from test surfaces. The method uses a component mixt. blend which enhances the removal of biofilm. The sampler, e.g. a cotton swab, can first be wet in the mixt., which removes biofilm, then the biofilm can be sampled from the surface with the sampler. On the other hand, the component blend can also be sprayed directly on the studied surface, whereafter the biofilm is sampled with the sampler. The microorganisms are detd. from the sampler with a method known per se, e.g. by cultivating. The component blend can also be used for pretreating surfaces prior to cleaning or disinfecting in order to remove biofilm layer formed by microbes. The compn. of the component blend is chosen according to the application. The method allows for reliable and replicable detn. of microorganisms formed on the investigated surfaces.

IC ICM C12Q001-24
ICS C12Q001-34

CC 9-16 (Biochemical Methods)
Section cross-reference(s): 17, 63

IT Aspergillus niger
Buffers
Chelating agents
Detergents
Medical goods
Mold (fungus)
Reducing agents
Scouring agents
Sterilization and **Disinfection**
(method and test kit for pretreatment of surfaces of **medical goods** and other biofilm-acquiring objects)

IT 60-00-4, Edta, biological studies 102-71-6, Triethanolamine, biological studies 9000-92-4, Amylase 9001-73-4, Papaine 9001-92-7, **Proteinase** 9012-54-8, Cellulase 9027-41-2, Hydrolytic enzymes 9032-75-1, Pectinase 25322-68-3D, derivs.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(method and test kit for pretreatment of surfaces of medical goods and other biofilm-acquiring objects)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1991:58284 HCAPLUS
DOCUMENT NUMBER: 114:58284
TITLE: Characteristics of a new bioindicator and the testing of thermal disinfection methods
AUTHOR(S): Senkpiel, Klaus; Hoffmann, Henning; Kantelberg, Ulrike; Ohgke, Helge; Beckert, Johannes
CORPORATE SOURCE: Inst. Hyg., Med. Univ. Luebeck, Luebeck, D-2400,

Germany
SOURCE: Zentralblatt fuer Hygiene und Umweltmedizin (1990), 190(3), 275-92
CODEN: ZHUMEO; ISSN: 0934-8859
DOCUMENT TYPE: Journal
LANGUAGE: German

AB The suitability of a thermostable metalloproteinase isolated from Bacillus thermoproteolyticus, thermolysin (E.C. 3.4.24.4), for application as a bioindicator for testing the effectiveness of hospital thermal disinfection methods (medical instruments, mattresses) was established. Various parameters such as optimal temp. (75.degree.) and pH (8.0), specific activity following immobilization on filter paper (24.588 .mu.mol/(mg.cntdot.min.cntdot.L)), Michaelis const. (5.63 .times. 10-3M, and Vmax (129.9 .mu.mol/L), were detd. after which its thermal deactivation kinetics was measured for temps. of 75-93.degree. and exposition times of 3-20 min. The immobilized enzyme was sealed in a polypropylene/polyester foil and compared with conventional phys. and microbiol. sterilization test methods, whereby variability coeffs. of 12-29% compared to the other methods was seen. The bioindicator was stable <12 wks. at room temp.

CC 9-2 (Biochemical Methods)
Section cross-reference(s): 7, 10, 63

ST **thermolysin** bioindicator heat disinfection hospital

IT Heat, biological effects
(disinfection by, **thermolysin**-contg. bioindicator for detn. of efficiency of, for hospitals)

IT Hospitals
(heat disinfection of medical and other goods in, **thermolysin** -contg. bioindicator for detn. of efficiency of)

IT **Medical goods**
(heat **disinfection** of, **thermolysin**-contg. bioindicator for detn. of efficiency of, for hospitals)

IT Sterilization and Disinfection
(heat, **thermolysin**-contg. bioindicator for detn. of efficiency of, for hospitals)

IT Michaelis constant
(of **thermolysin**, of Bacillus thermoproteolyticus)

IT Kinetics, enzymic
(of **thermolysin**, of Bacillus thermoproteolyticus, thermal deactivation effect on)

IT Bacillus thermoproteolyticus
(**thermolysin** of, as bioindicator for detn. of heat disinfection efficiency, for hospitals)

L42 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1990:565408 HCAPLUS
DOCUMENT NUMBER: 113:165408
TITLE: Protease for the treatment of viral infections and sterilization of pharmaceutical and food products
INVENTOR(S): Sutton, Peter Morgan; Oxford, John Sydney
PATENT ASSIGNEE(S): Public Health Laboratory Service Board, UK; Retroscreen Ltd.
SOURCE: Eur. Pat. Appl., 6 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

EP 358500	A1	19900314	EP 1989-309061	19890907
R: ES, GR				
WO 9002562	A1	19900322	WO 1989-GB1053	19890907
W: AU, JP, US				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AU 8942057	A1	19900402	AU 1989-42057	19890907
EP 433353	A1	19910626	EP 1989-910134	19890907
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 04500518	T2	19920130	JP 1989-509772	19890907
ZA 8906864	A	19900627	ZA 1989-6864	19890908
PRIORITY APPLN. INFO.:			GB 1988-21049	19880908
			WO 1989-GB1053	19890907

AB A viral infection is treated by administering a protease, esp. a plant protease such as bromelain, papain or ficin. Examples of viral infections include infections with DNA- or RNA-contg. viruses or infections caused by prions. The proteases are also useful in the prodn. or sterilization of pharmaceutical prepns. or food-stuffs to decrease the content of virus, pro-virus or virus-infected cells therein and in the sterilization or decontamination of surgical devices. Virucidal effects of bromelain were tested with an allantoic fluid infected with influenza virus and a HIV-infected human T-lymphocytes cell line.

IC ICM A61K037-54
ICS A61K037-547

CC 1-5 (Pharmacology)
Section cross-reference(s): 17, 63

IT Blood
Food
Medical goods
Transplant and Transplantation, animal
(**sterilization** of, virucidal proteases for)

IT 9001-00-7, Bromelain 9001-33-6, **Ficin** 9001-73-4, **Papain** 9001-92-7, Protease 9002-07-7, **Trypsin** 9004-07-3, Chymotrypsin
RL: BIOL (Biological study)
(viral infection and contamination treatment with)

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     FILE 'WPIDS' ENTERED AT 12:24:39 ON 20 OCT 2003
L1        561019 S HEATING OR STERILI?
L2         19638 S (MEDICAL OR SURGICAL) (2A) (GOOD# OR INSTRUMENT# OR APPARAT?
L3          2107 S L1 (L) L2
L4            54 S KERATINASE
L5             1 S L3 AND L4
L6          2624 S PROTEOLY? (4A) ENZYM?
L7             5 S L3 AND L6
L8           413 S BACILLUS LICHEN?
L9             2 S L8 AND L3
L10          491 S SUBTILISIN? OR CARBONYL (2A) HYDROLAS?
L11            1 S L10 AND L3
L12            6 S L5 OR L7 OR L9 OR L11
L13        22957 S ENZYM? (S) (DEGRA? OR HYDROLY? OR TREAT?)
L14            9 S L3 AND L13
L15           12 S L14 OR L12
L16          329 S HEAT? (S) (ENHANCE? OR INCREASE?) (S) (PROTEOLY? OR ENZYM?)
L17            1 S L3 AND L16
L18           12 S L15 OR L17

     FILE 'WPIDS' ENTERED AT 12:32:10 ON 20 OCT 2003

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L1        561019 SEA FILE=WPIDS ABB=ON  PLU=ON  HEATING OR STERILI?
L2         19638 SEA FILE=WPIDS ABB=ON  PLU=ON  (MEDICAL OR SURGICAL) (2A)
                 (GOOD# OR INSTRUMENT# OR APPARAT? OR ARTICLE?)
L3          2107 SEA FILE=WPIDS ABB=ON  PLU=ON  L1 (L) L2
L4            54 SEA FILE=WPIDS ABB=ON  PLU=ON  KERATINASE
L5             1 SEA FILE=WPIDS ABB=ON  PLU=ON  L3 AND L4
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L6          2624 SEA FILE=WPIDS ABB=ON  PLU=ON  PROTEOLY? (4A) ENZYM?
L7             5 SEA FILE=WPIDS ABB=ON  PLU=ON  L3 AND L6
L8           413 SEA FILE=WPIDS ABB=ON  PLU=ON  BACILLUS LICHEN?
L9             2 SEA FILE=WPIDS ABB=ON  PLU=ON  L8 AND L3
L10          491 SEA FILE=WPIDS ABB=ON  PLU=ON  SUBTILISIN? OR CARBONYL (2A)
                 HYDROLAS?
L11            1 SEA FILE=WPIDS ABB=ON  PLU=ON  L10 AND L3
L12            6 SEA FILE=WPIDS ABB=ON  PLU=ON  L5 OR L7 OR L9 OR L11
L13        22957 SEA FILE=WPIDS ABB=ON  PLU=ON  ENZYM? (S) (DEGRA? OR HYDROLY?
                 OR TREAT?)
L14            9 SEA FILE=WPIDS ABB=ON  PLU=ON  L3 AND L13
L15           12 SEA FILE=WPIDS ABB=ON  PLU=ON  L14 OR L12
L16          329 SEA FILE=WPIDS ABB=ON  PLU=ON  HEAT? (S) (ENHANCE? OR INCREASE?
                 ) (S) (PROTEOLY? OR ENZYM?)
L17            1 SEA FILE=WPIDS ABB=ON  PLU=ON  L3 AND L16
L18           12 SEA FILE=WPIDS ABB=ON  PLU=ON  L15 OR L17


=> d .wp 1-12 l18

L18  ANSWER 1 OF 12  WPIDS  COPYRIGHT 2003 THOMSON DERWENT on STN
AN   2003-559838 [53]    WPIDS
DNN  N2003-445031
TI   Method for disinfecting and sterilizing appliances as well as washing and
     sterilizing equipment.
DC   P31 P34 S05
IN   WANG, A; WANG, T; WANG, X
PA   (WANG-I) WANG A
CYC  1
PI   CN 1415380    A  20030507 (200353)*
ADT  CN 1415380 A CN 2002-139173 20021014
PRAI CN 2002-139173   20021014
AB   CN   1415380 A UPAB: 20030820
     NOVELTY - A method for disinfecting the general apparatus and
     medical equipment features that the biologic enzyme able
     to degradate biologic and organic substances, the chemical
     disinfectant, and the ozonized water able to disinfect, decompose and
     neutralize organic and inorganic substances are integrated, and includes
     washing with the solution of biologic enzyme,
     sterilizing with chemical disinfectant, washing with ozonized
     water, baking and harmless drainage. Its equipment is composed of sealed
     shower unit, ozone generator, biologic enzyme and chemical
     disinfectant feeder, baker and microcomputerized control system.
     Dwg.0/0

L18  ANSWER 2 OF 12  WPIDS  COPYRIGHT 2003 THOMSON DERWENT on STN
AN   2003-176090 [18]    WPIDS
DNN  N2003-138554        DNC C2003-046305
TI   Sterilizing method for medical equipment and its cleaning sterilizer.
DC   D22 P34
IN   WANG, A; WANG, H; WANG, X
PA   (WANG-I) WANG H
CYC  1
PI   CN 1377708    A  20021106 (200318)*
ADT  CN 1377708 A CN 2002-115814 20020509
PRAI CN 2002-115814   20020509
AB   CN   1377708 A UPAB: 20030317
     NOVELTY - The sterilizing method for medical equipment is to
     combine the sterilizing function of ozonized water and organic
     matter degrading function of enzyme. The equipment be
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used to **sterilize** endoscope and **surgical instruments**, and the **sterilizing** includes the steps of: washing with **enzyme** solution, washing with water, **sterilizing** with high concentration ozonized water, stoving and no-harm **treatment**. The cleaning **sterilizer** for implementing the said method includes an enclosed sprayer, an ozone generator, a stove and a microcomputerized control system and includes a no-harm **treater**.
Dwg.0/0

L18 ANSWER 3 OF 12 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 2002-750710 [81] WPIDS
DNC C2002-212836
TI **Treatment** for reducing infective prion protein at locus contaminated or suspected of being contaminated with infective prion protein by heating the locus at predetermined conditions, and exposing heated locus to **proteolytic enzyme**.
DC D13 D16 D22
IN SHIH, J C H
PA (BIOR-N) BIORESOURCE INT INC; (SHIH-I) SHIH J C H
CYC 98
PI WO 2002083082 A2 20021024 (200281)* EN 41p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW
US 2002172989 A1 20021121 (200301)
US 2002192731 A1 20021219 (200303)
US 6613505 B2 20030902 (200359)
ADT WO 2002083082 A2 WO 2002-US8982 20020322; US 2002172989 A1 US 2001-834284 20010412; US 2002192731 A1 CIP of US 2001-834284 20010412, US 2001-7613 20011026; US 6613505 B2 US 2001-834284 20010412
PRAI US 2001-7613 20011026; US 2001-834284 20010412
AB WO 200283082 A UPAB: 20021216
NOVELTY - **Treatment** for reduction of infective prion protein at a locus contaminated or suspected of being contaminated with infective prion protein involves **heating** the locus to **enhance** the **proteolytic** susceptibility of infective prion protein at the locus, and exposing the **heated** locus to a **proteolytic enzyme** to at least partially reduce the infective protein prion at such locus.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:

(a) a cleansing composition for disinfecting articles that are susceptible to contamination by infectious prion protein, which comprises at least one proteolytic protein, and a solvent;

(b) a tissue composition comprising tissue containing or contaminated with an infectious prion protein and a **proteolytic enzyme** including **keratinase enzymes**, chymotrypsins, pepsins, chymosins, cathepsins, **subtilisins**, elastases, collagenases, endopeptidases, peptidases, oligopeptidases, thermolysins, bacillolysin, mycilysins, carboxypeptidases, leucyl aminopeptidases, aminopeptidases, or extremthermiphilic proteases;and

(c) a method of processing of an animal meat product or by-product, which comprises treating the animal meat product or by-product with a protease for destruction of any infectious prion protein associated with it at above 40 deg. C but below the pyrolytic destruction temperature of the prion protein.

USE - The treatment method is used for the reduction of infective

prion protein at a locus contaminated or suspected of being contaminated with such infective prion protein. The locus includes article(s) that are susceptible to contamination by infectious prion protein and which comprises **surgical instrument**(s) including clamps, forceps, scissors, knives, cables, punches, tweezers, cannulae, calipers, carvers, curettes, scalers, dilators, clip applicators, retractors, contractors, excavators, needle holders, suction tubes, coagulation electrodes, electroencephalographic depth electrodes, rib and sternum spreaders, bipolar probes, or rib shears. The articles comprise cutleries and kitchen utensils including knives, forks, scissors, peelers, parers, slicers, spatulas, or cleavers. They include laboratory apparatus including containers, filtration devices, centrifuges, spectrophotometers, or fluorometers. The articles also include veterinary devices including clamps, forceps, knives, saws, probes, or electronic stun equipment. The method is particularly used for processing of an animal meat product or by-product. (All claimed). The method is used for the treatment of biological materials, e.g. animal tissue containing or contaminated with infectious prion proteins. It enables processing of biological materials which would otherwise require incineration and disposal into useful and safe animal feeds or other nutritional end products. It is also useful for disinfection and/or **sterilization** of **articles**, e.g. **surgical instruments**, cutleries, kitchen utensils, laboratory apparatus, and veterinary tools.

ADVANTAGE - The method effectively prevents cross-contamination and propagation of infective prion protein caused by reuse of the articles.

DESCRIPTION OF DRAWING(S) - The figure illustrates gel electrophoresis/western blot results on SDS-PAGE gel.

Dwg.2/2

TECH UPTX: 20021216

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Condition: The locus is heated to not more than 150 preferably 125-140degreesC.

The exposing step is carried out at 35-100 preferably 50degreesC or at a temperature that is lower than that of the heating step.

The method further comprises testing the locus to verify reduction of infective prion protein by subjecting the locus to a test including Western blot tests, sandwich immunoassay tests, enzyme linked immunosorbent assay tests, fluoroimmunoassay tests, capillary immuno-electrophoresis tests, or plasminogen binding tests.

The locus comprises tissue containing or contaminated by infective prion protein, or including mammalian tissue, nervous system tissue, bovine tissue, bovine spongeform encephalopathy (BSE)-infected tissue, ovine tissue, or scrapie-infected tissue. It can be brain, pituitary, intestine, lung, heart, kidney, or spleen tissues. It is from a carrier animal for the infective prion protein.

Preferred Concentration: The concentration of the **keratinase** enzymes is 0.2-1 g/l.

Preferred **Enzymes**: The **proteolytic enzyme** comprises **keratinase enzymes**, proteinase K, chymotrypsins, pepsins, chymosins, cathepsins, **subtilisins**, elastases, collagenases, endopeptidases, peptidases, oligopeptidases, thermolysins, bacillolysin, mycilysins, carboxypeptidases, leucyl aminopeptidases, aminopeptidases, extremthermophilic proteases, **carbonyl hydrolase**, papain, pancreatin, streptokinase, streptodornase, ficin, carboxypeptidase, chymopapain, or bromelin.

The **proteolytic enzyme** comprises a **keratinase enzyme** and/or an active fragment of the enzyme. It comprises a **Bacillus licheniformis** PWD-1 enzyme and/or its active fragment. It comprises a protease enzyme or a **carbonyl hydrolase** comprising **subtilisin** which comprises a mutant of wild-type Bacillus amyloliquefaciens **subtilisin** comprising at

least one amino acid substitutions, additions, or deletions.
Preferred Components: The cleansing composition further comprises at least one chemical additive including surfactants, builders, boosters, or fillers.

L18 ANSWER 4 OF 12 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 2002-557743 [59] WPIDS
DNN N2002-441456 DNC C2002-158366
TI Inactivating transmissible spongiform encephalopathy (TSE) agent such as Creutzfeldt-Jacob disease, scrapie, kuru or Gerstmann-Straussler-Scheinker syndrome involves exposing agent to thermostable **proteolytic enzyme**.
DC B04 D16 D22 P34 S03
IN RAVEN, N D H
PA (MICR-N) MICROBIOLOGICAL RES AUTHORITY
CYC 100
PI WO 2002053723 A2 20020711 (200259)* EN 41p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
ADT WO 2002053723 A2 WO 2002-GB52 20020108
PRAI GB 2001-4696 20010226; GB 2001-420 20010108
AB WO 200253723 A UPAB: 20020916
NOVELTY - Inactivating (M1) a transmissible spongiform encephalopathy agent comprising exposing TSE agent to a thermostable **proteolytic enzyme**, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:
(1) **sterilizing** (M2) apparatus by exposing the apparatus to a solution comprising a thermostable **proteolytic enzyme**;
(2) a composition (I) for inactivating TSE agent, comprising a thermostable **proteolytic enzyme**;
(3) an apparatus for inactivating a TSE agent, comprising a chamber for receiving contaminated material, unit for controlling the temperature of the chamber and a thermostable **proteolytic enzyme** active at alkaline pH, located within the chamber;
(4) an antibody (II) specific for prion dimer but does not bind to prion monomer; and
(5) a purified prion dimer.
USE - (M1) is useful for inactivating TSE agent such as a prion. TSE agent is Creutzfeldt-Jacob disease or its variant, kuru, fatal familial insomnia, Gerstmann-Straussler-Scheinker syndrome, bovine spongiform encephalopathy, scrapie, feline spongiform encephalopathy, chronic wasting disease or transmissible mink encephalopathy. (I) is useful for **sterilizing** material contaminated with the TSE agent. Prion dimer is useful for examining a sample infected with or suspected to be infected by prion protein, and for detecting prion infectivity, by detecting prion dimer in the sample. The sample contains prion monomer, prion dimer, or their mixtures, or dimer of a fragment of a prion, and is probed with an antibody specific to prion monomer or dimer. The sample is determined whether it contains protein with a molecular weight corresponding to twice that of prion monomer. The prion dimer is also useful for producing (II), by immunizing an animal with a prion dimer, obtaining its extract which contains (II), and isolating from the extract (II). The method comprises obtaining an antibody preparation containing antibodies which bind prion dimer, and removing (II) from the preparation (all claimed). (M1) is

useful in a prophylactic or precautionary mode, where definite knowledge of infection is uncertain, e.g. in **sterilization** protocols for preparation of **surgical apparatus** prior to use in surgical procedures. (M1) and (I) are useful for inactivation of TSE agents in potentially contaminated clinical waste and culled animal material. (M1) is useful for **sterilizing** larger surface areas of apparatus, operating tables or even walls of rooms.

ADVANTAGE - (M1) eliminates false negative results, and does not require highly specialized facilities for complete inactivation of TSE agent when compared to the more energy intensive and expensive incineration procedures. (M1) successfully decontaminates equipment at 50-70 deg. C and pH 9-12, compared to conventional methods, where extremes of temperature are used which leads to damage to the equipment being decontaminated.

Dwg.0/11

TECH UPTX: 20020916

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Method: (M1) comprises exposing TSE agent to the thermostable protease at least40degreesC, 50-120degreesC or 55-85degreesC, preferably 60 or 80degreesC. The pH is acidic, alkaline or neutral (7) or 8-13, preferably 12. The thermostable **proteolytic enzyme** is obtained from a thermophilic organism such as archaea, hyperthermophilic bacteria or thermophilic bacteria. The thermophilic organism is Thermotoga maritima, Thermotoga neopolitana, Thermotoga thermarum, Fervidobacterium islandicum, Fervidobacterium nodosum, Fervidobacterium pennivorans, Thermosipho africanus, Aeropyrum pernix, Thermus flavus, Pyrococcus spp., Sulfolobus solfataricus, Desulfurococcus, Bacillus thermoproteolyticus, B.stearo-thermophilus, B.sp. 11231, 11276, 11652 or 12031, Thermus aquaticus, Thermus caldophilus, or Thermus sp. 16132, 15673 or Rt41A. In (M2), the solution is maintained at 100degreesC or 45-85degreesC. The solution is applied to the apparatus as a spray, and the apparatus is immersed in the solution. The apparatus can be sterilized by exposing it to first and second solution comprising **proteolytic enzymes** which are same or different. The pH and temperature of the first solution is different to that of the second solution.

Preferred Composition: (I) further comprises a buffering agent of pKa 8-13, sodium hydroxide to set pH to 12, and a detergent compound (especially sodium dodecyl sulfate (SDS)).

Preferred Antibody: (II) is a labeled antibody.

L18 ANSWER 5 OF 12 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 2002-049113 [06] WPIDS
DNN N2002-036367 DNC C2002-013709
TI Cleaning composition for cleaning medical instruments, e.g. colonoscopes, includes enzyme, quat biocide, and activity protector.
DC D16 D22 D25 E19 P34
IN KRITZLER, S; SAVA, A
PA (NOVA-N) NOVAPHARM RES AUSTRALIA PTY LTD
CYC 97
PI WO 2001076647 A1 20011018 (200206)* EN 37p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001046237 A 20011023 (200213)
BR 2001010145 A 20030107 (200309)
EP 1294410 A1 20030326 (200323) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT

RO SE SI TR
TW 491713 A 20020621 (200323)
KR 2003011292 A 20030207 (200339)
CN 1422165 A 20030604 (200356)

ADT WO 2001076647 A1 WO 2001-AU381 20010405; AU 2001046237 A AU 2001-46237 20010405; BR 2001010145 A BR 2001-10145 20010405, WO 2001-AU381 20010405; EP 1294410 A1 EP 2001-918998 20010405, WO 2001-AU381 20010405; TW 491713 A TW 2001-108328 20010406; KR 2003011292 A KR 2002-713351 20021004; CN 1422165 A CN 2001-807715 20010405

FDT AU 2001046237 A Based on WO 2001076647; BR 2001010145 A Based on WO 2001076647; EP 1294410 A1 Based on WO 2001076647

PRAI AU 2000-6791 20000407

AB WO 200176647 A UPAB: 20020128
NOVELTY - A cleaning composition comprises an enzyme, a quat biocide, and an activity protector.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method for cleaning a **surgical instrument** by immersing the instrument in a solution comprising the inventive composition and **sterilizing** the instrument.
USE - For cleaning **medical instruments**, e.g. endoscopes, colonoscopes, laparascopes, other surgical, medical, biopsy, dental, parts of the instruments and paraphernalia, and hair-dressing tools and beauty parlor equipment.
ADVANTAGE - The invention avoids the risk of infection to persons cleaning **medical instruments**.
Dwg.0/0

TECH UPTX: 20020128
TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Composition: The **enzyme** is **proteolytic enzymes**, carbohydrases, esterases, hydrases, amylases, proteases, catalases, lipases, amylase, cellulases, peroxidases, and/or invertases.
A protease is also included in the composition.
The activity protector is enzyme stabilizers, enzyme stabilizing systems, and/or micelle formation modifiers and inhibitors.
The biocidal efficacy of the quat biocide is protected by enzyme stabilizer(s) and stabilizer enhancers from boron compound, polyols having 2-6 hydroxyl groups, formates, calcium ions, polyfunctional amino compounds phosphates, citrates, sulfates, or sequestering agents.
It can be protected by a micelle immiscible solvent.
The shelf stable liquid disinfectant concentrate composition contains at least 1% by weight of quat biocide and capable of dilution with 20 (preferably 200) parts water to 1 part of concentrate.
Preferred Property: The diluted solution exhibits a minimum inhibitory concentration (MIC) after 24 hours in the presence of up to 2% tryptone which is less than the MIC of a solution of the same concentration of the same quat biocide in distilled water in the presence of protein.

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Composition: The quat biocide is a monomeric quat. ammonium antimicrobial compound of formula R-(R')N(R')-R X.
R'-R = optionally substituted, optionally branched, optionally cyclic alkyl;
X = anion, preferably chlorine or bromine
The quat biocide can be mono-long-alkyl chain, tri-short chain, tetralkyl ammonium compounds; and/or di-long-chain, di-short chain tetralkyl ammonium compounds. It is 8-22C dimethyl benzyl ammonium chloride, 8-22C dimethyl ethyl benzyl ammonium chloride, di-6-20C alkyl dimethyl ammonium chloride, or preferably a benzyl dimethyl ammonium halide.
The micelle immiscible solvent is 1-6C alkanols, 1-6C diols, 3-24C alkylene glycol ethers, alkylene glycol alkyl ethers, borates, lactates,

citrates, and/or tart rates.
The solvent includes di(propylene glycol) methyl ether (DPM).
The composition also includes DPM, and nonionic surfactant.
TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Component: The stabilizer is boric acid, boric oxide, borax, or sodium ortho-, meta-, or pyro-borate and perborates (preferably sodium tetraborate).

TECHNOLOGY FOCUS - POLYMERS - Preferred Component: The polyol is ethylene glycol, propylene glycol 1,2 propanediol, butyleneglycol, glycerol, mannitol, sorbitol, erythritol, glucose, fructose, or lactose.

L18 ANSWER 6 OF 12 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 2001-226434 [23] WPIDS
DNN N2001-160927 DNC C2001-067525
TI Shape memory polyurethane or polyurethane-urea polymer, for medical device, article or implant, includes a reaction product of silicon based macrodiol, silicon-based macrodiamine and/or polyether, a diisocyanate, and a chain extender.
DC A25 A26 A96 D22 P34
IN ADHIKARI, R; GUNATILLAKE, P A; MCCARTHY, S J; MEIJS, G F
PA (ELAS-N) ELASTOMEDIC PTY LTD; (AORT-N) AORTECH BIOMATERIALS PTY LTD; (AORT-N) AORTECH BIOMATERIALS HOLDINGS PTY LTD; (ADHI-I) ADHIKARI R; (GUNA-I) GUNATILLAKE P A; (MCCA-I) MCCARTHY S J; (MEIJ-I) MEIJS G F
CYC 95
PI WO 2001007499 A1 20010201 (200123)* EN 36p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000057974 A 20010213 (200128)
BR 2000012571 A 20020416 (200234)
EP 1203038 A1 20020508 (200238) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
US 2002161114 A1 20021031 (200274)
CN 1361799 A 20020731 (200279)
JP 2003505562 W 20030212 (200321) 45p
ADT WO 2001007499 A1 WO 2000-AU863 20000718; AU 2000057974 A AU 2000-57974 20000718; BR 2000012571 A BR 2000-12571 20000718, WO 2000-AU863 20000718; EP 1203038 A1 EP 2000-943480 20000718, WO 2000-AU863 20000718; US 2002161114 A1 Cont of WO 2000-AU863 20000718, US 2002-54742 20020122; CN 1361799 A CN 2000-810616 20000718; JP 2003505562 W WO 2000-AU863 20000718, JP 2001-512580 20000718
FDT AU 2000057974 A Based on WO 2001007499; BR 2000012571 A Based on WO 2001007499; EP 1203038 A1 Based on WO 2001007499; JP 2003505562 W Based on WO 2001007499
PRAI AU 1999-1707 19990720
AB WO 200107499 A UPAB: 20010425
NOVELTY - A shape memory polyurethane or polyurethane-urea polymer includes a reaction product of a silicon based macrodiol, silicon-based macrodiamine and/or polyether, a diisocyanate, and a chain extender.
DETAILED DESCRIPTION - A shape memory polyurethane or polyurethane-urea polymer includes a reaction product of: (i); (a) silicon based macrodiol, silicon-based macrodiamine and/or polyether of the formula (I):
A-((CH2)m- O)n-(CH2)m-A' (I)
(b) a diisocyanate; and (c) a chain extender; or (ii); (b) a diisocyanate: and (c) a chain extender, the polymer having a glass

transition temperature which enables the polymer to be formed into a first shape at a temperature higher than the glass transition temperature and maintained in the first shape when the polymer is cooled to a temperature lower than the glass transition temperature, the polymer then being capable of resuming its original shape on **heating** to a temperature higher than the glass transition temperature.

A and A' = endcapping groups;
m = an integer of 6 or more; and
n = an integer of 1 or greater.

INDEPENDENT CLAIMS are also included for: (1) a process for preparing a shape memory polymer by: (i) mixing component (a) and the chain extender (c); and (ii) reacting the mixture with the diisocyanate (b); and (2) a process for preparing a shape memory polymer by: (i) reacting component (a) with a diisocyanate (b) to form a prepolymer; and reacting the prepolymer with the chain extender (c).

USE - A device or article which is composed wholly or partly of the shape memory polymer is a **medical** device, **article** or implant (claimed). The device or article is a stylet; bone suture anchor; vascular, oesophageal or bilial stent; cochlear implant; reconstructive facial surgery; controlled drug release device; component in key-hole surgery; biosensor; membrane for cell encapsulation; medical guidewire; medical guidepin; cannularization; pacemaker, defibrillator or neurostimulator and their respective electrode leads; ventricular assist device; orthopaedic joint or parts thereof; intraoccular lens; urological device; stent/graft device; device joining/extending/repair sleeves; heart valve; vein graft; vascular access port; vascular shunt; blood purification device; cast for a broken limb; vein valve, angioplasty, electrophysiology or cardiac output catheter; or tools for insertion of medical devices, infusion and flow control devices, a toy or component, shape memory film, pipe coupling, electrical connector, zero-insertion force connector, robotic, aerospace actuator, dynamic display, flow control device, sporting goods and components, body conforming device, temperature control device, safety release device or heat shrink insulation (claimed).

ADVANTAGE - The shape memory polyurethane has improved mechanical properties, clarity, processability, biostability and/or **degradation** resistance (claimed). The improved mechanical properties are tensile strength, tear strength, flex fatigue resistance, abrasion resistance, Durometer hardness, flexural modulus and/or related measures of flexibility or elasticity. The improved resistance to **degradation** is resistance to free radical, oxidative, **enzymatic** and/or **hydrolytic** processes and/or to **degradation** when implanted as a biomaterial. The improved processability is ease of processing by casting and/or thermal means (claimed).

Dwg.0/0

TECH UPTX: 20010425

TECHNOLOGY FOCUS - POLYMERS - Preferred Components: (a) is a combination of at least two macrodiols, at least two macrodiamines or at least one macrodiol and at least one macrodiamine, has greater than 50 (preferably 70) % silicon-based macrodiol, and the molecular weight 300 - 2000 (preferably 300 - 700). The silicon-based macrodiol or macrodiamine is a polysilane, polysiloxane, amino-terminated polysiloxane or a silicon-based polycarbonate. The polysiloxane or amino-terminated polysiloxane is of formula (II):

AR5(SiR1R3)(R7SiR2R4)pR6A' (II)

R1, R2, R3, R4, R5 and R6 = hydrogen or an optionally substituted straight chain, branched or cyclic, saturated or unsaturated hydrocarbon radical;

R7 = a divalent linking group of O, S or NR, or an optionally

substituted straight chain, branched or cyclic, saturated or unsaturated hydrocarbon radical; and
p = an integer of 1 or greater.
Preferably A and A' = OH;
R1- R4 = methyl; and
R5 - R6 = propylene, butylene, pentylene, hexylene, ethoxypropyl (-CH2CH2OCH2CH2CH2-), propoxypropyl and butoxypropyl.
The molecular weight of the polysiloxane macrodiol is 200 - 6000 (preferably 500 - 2000). The amino-terminated polysiloxane is a polysiloxane macrodiamine which is a polymer of the formula (II) where A is NH2, and preferably is a amino-terminated PDMS. The silicon-based polycarbonate has the formula (III):
AR8O(CO)-(OR8O(CO))x-OR8-(OR9)y-O(CO)OR10O(CO)O-R8A' (III)
R8 = R5(SiR1R3)(R7SiR2R4)mR6
R9 and R10 = optionally substituted straight chain, branched or cyclic, saturated or unsaturated hydrocarbon radical;
m = 0 - 20;
x = 1 - 50;
y = 0 - 10; and
z = 0 - 50.
Preferably A and A' = OH;
R9 = ethyl; and
R10 = hexyl.
The molecular weight of the polycarbonate macrodiol is 400 - 5000 (preferably 400 - 2000). The polyether is a polyether macrodiol of formula (IV):
HO- ((CH2)m-O)n-H (IV)
The polyether macrodiol is poly(tetramethylene oxide) (PTNO), poly(hexamethylene oxide) (PEMO), poly(heptamethylene oxide), poly(octamethylene oxide) (POMO) or poly(decamethylene oxide) (PDMO), and the molecular weight range of the polyether macrodiol is 300 - 2000 (preferably 300 - 700). Component (a) is a combination of PDMS or amino-terminated PDMS with another polymer falling within the scope of component (a). Another polymer is a polyether of the formula (I) or a silicon based polycarbonate, where the polyether of (I) is PHMO. The silicon-based polycarbonate is siloxy carbonate. 33. The diisocyanate is an aliphatic or aromatic diisocyanate, preferably 4,4'-diphenylmethane diisocyanate (MDI), methylene biscyclohexyl diisocyanate, (H12MDI), p-phenylene diisocyanate (p-PDI), trano-cyclohexane-1,4-diisocyanate (CEDI), 1,6-diisocyanatohexane (DICH), 1,5-diisocyanatonaphthalene (NDI), para-tetramethylxylenediisocyanate (p-TMXDI), meta-tetramethylxylene diisocyanate (m-TMXDI), 2,4-toluene diisocyanate (2,4-TDI) isomers or mixtures or isophorone diisocyanate (IPDI). The chain extender is a diol or diamine chain extender. The diol chain extender is 1,4-butanediol, 1,6-hexanediol, 1,8-octanediol, 1,9-nonanediol, 1,10-decanediol, 1,12-dodecanediol, 1,4-cyclohexanediol, 1,4-cyclohexanedimethanol, p-xyleneglycol, 1,3-bis(4-hydroxybutyl)tetramethyldisiloxane, 1,3-bis(6-hydroxyethoxypropyl)tetramethyldisiloxane or 1,4-bis(2-hydroxyethoxy)benzene. The diamine chain extender is 1,2-ethylenediamine, 1,3-propanediamine, 1,4-butanediamine, 1,3-bis(3-aminopropyl)tetramethyldisiloxane, 1,3-bis(4-aminobutyl)tetramethyldisiloxane or 1,6-hexanediamine. Component (a) polymer forms the soft segment of the polyurethane or polyurethane-urea polymer. Components (b) and (c) of the polymer form the hard segment of the polyurethane or polyurethane-urea polymer. The amount of hard segment in the polymer is 30 - 100 (preferably 50 - 80, especially 60 - 70) wt%. The shore hardness of the polymer below the glass transition temperature is 82 - 50D, while the hardness above the glass transition temperature is 20 - 30D, and the glass transition temperature is 20 - 100 (preferably 20 - 60) degreesC. Preferred Composition: The shape memory composition which

includes a blend of two or more of the shape memory polyurethane or polyurethane-urea or at least one shape memory polyurethane or polyurethane-urea polymer is in combination with another material such as a polymeric or a nonpolymeric material. The polymeric material is a polyurethane, shape memory polyurethane, polyolefin, polyamide or a liquid crystalline polymer. Each of the polymers forming the shape memory composition have different glass transition temperatures and/or different amounts of hard segment component, and includes a first polymer with a low glass transition temperature of below about ambient temperature and a second polymer with a glass transition temperature above the ambient temperature. Preferred Process: Step (i) is performed at a temperature 45 - 100 degreesC.

L18 ANSWER 7 OF 12 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 2001-103020 [11] WPIDS
DNC C2001-030236
TI Processing of fruits and/or vegetables, e.g. cranberries, for preparing juice enriched in, e.g. factors for anti-adhesion of bacteria, comprises heating a composition to a controlled temperature for a longer duration.
DC D13 D22 F07
IN MANTIUS, H L
PA (OCEA-N) OCEAN SPRAY CRANBERRIES INC
CYC 95
PI WO 2001003520 A1 20010118 (200111)* EN 20p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000059146 A 20010130 (200127)
EP 1194045 A1 20020410 (200232) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
ADT WO 2001003520 A1 WO 2000-US18436 20000705; AU 2000059146 A AU 2000-59146 20000705; EP 1194045 A1 EP 2000-945165 20000705, WO 2000-US18436 20000705
FDT AU 2000059146 A Based on WO 2001003520; EP 1194045 A1 Based on WO 2001003520
PRAI US 1999-142791P 19990708
AB WO 200103520 A UPAB: 20011129
NOVELTY - Fruits and/or vegetables are processed by **heating** a fruit and/or a vegetable composition comprising fruit and/or vegetable of at least one species to greater than 140 deg. F for at least 2 minutes; treating the heat-treated composition to separate the juice from insoluble solids present in the composition; and collecting the juice.

USE - The method is for preparing a juice from fruits and/or vegetables (claimed), e.g. cranberries, prunes, carrots, lettuce, enriched in beneficial compounds, e.g. factors which inhibit bacterial adhesion. The juice enriched in an anti-adhesion factor can be used in juice drinks or as a food additive to confer anti-adhesion health benefits. This juice can also be used to coat materials, e.g. **medical instruments**, **medical** dressings, tampons, diapers, and food processing equipment, to reduce bacterial adhesion. The juice can also be added to toothpaste, mouthwash, antiseptics, and other topically administered products.

ADVANTAGE - The method provides fruit and vegetable products that retain high levels of beneficial compounds, e.g. factors that inhibit bacterial adhesion, lower cholesterol, or reduce risk of heart disease or various cancers.

Dwg.0/1

TECH UPTX: 20010224
TECHNOLOGY FOCUS - FOOD - Preferred Method: The fruit or vegetable composition is exposed to an **enzyme** (pectinase for the fruit) before heat-**treatment** or before **treatment** to separate the juice from the insoluble solids. The fruit or vegetable composition is heated to greater than 140, preferably greater than 150degreesF, for at least 15 minutes. The fruit juice may be dried to produce a powder. The fruit or vegetable juice may be concentrated or microfiltered. The microfiltered juice may be further ultrafiltered. The microfiltered and ultrafiltered juice can also be dried to produce a powder. Preferred Composition: The fruit composition comprises fruit, e.g. cranberries, that has been processed to size-reduce whole fruit, frozen fruit, extracted fruit, or fruit from the genus Vaccinium. The vegetable composition comprises vegetables that have been processed to size-reduce whole vegetables, or frozen vegetables.

L18 ANSWER 8 OF 12 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 2001-025584 [04] WPIDS
DNN N2001-019884
TI Iodine-tungsten lamp sterilization method using adaptive **enzyme** liquor to make front-**treatment**.
DC P34 S05
IN LIU, C
PA (LIUC-I) LIU C
CYC 1
PI CN 1268379 A 20001004 (200104)*
ADT CN 1268379 A CN 1999-112139 19990326
PRAI CN 1999-112139 19990326
AB CN 1268379 A UPAB: 20010118
NOVELTY - The iodine-tungsten lamp disinfection method using adaptive enzyme liquid for pretreatment is disclosed and includes using iodine-tungsten lamp to radiate. It is characterized by that before radiation, the **medical instrument** and equipment to be **sterilized** are cleaned by adaptive enzyme solution under the action of ultrasonic wave, and using same procedure to **sterilize** fire control cloth which is then used to envelop the **sterilized medical instrument** and equipment. The concentration of said adaptive enzyme solution is 6-10%. The invented method is quick and thorough, and can save labour and material.
Dwg.0/0

L18 ANSWER 9 OF 12 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 1993-016018 [02] WPIDS
DNC C1993-007573
TI Strain of **Bacillus licheniformis** bacteria - is used to monitor and control efficiency of sterilisation with hot dry air.
DC B04 D16 D22
IN GUTERMAN, R L
PA (DISI-R) DISINFECTION STERILISATION RES INST
CYC 1
PI SU 1712403 A1 19920215 (199302)* 5p
ADT SU 1712403 A1 SU 1989-4693565 19890518
PRAI SU 1989-4693565 19890518
AB SU 1712403 A UPAB: 19931118
Spore-forming **Bacillus licheniformis** VKM V-1711D is used to monitor and control the efficiency of **sterilisation** of **medical instruments** with hot dry air. The strain was extracted from a Petri dish **sterilised** with hot air, and is used as a marker strain in testing new hot air **sterilisers** and for developing new methods.

USE - In medicinal microbiology.

In an example, samples contg. 500-5000 spores were placed in a number of Petri dishes and subjected to varying conditions of **sterilisation**. Subsequently the samples were cultivated in Hottinger's agar medium for 14 days at 37 +/-1 deg.C, and their growth or lack of growth were used as indicators of efficiency of the process.

Bul.6/15.2.92

Dwg. 0/0

L18 ANSWER 10 OF 12 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 1989-341321 [47] WPIDS
DNN N1989-259928 DNC C1989-151241
TI Cleaning and disinfection of endoscopes - using soln. contg. nonionic surfactant, protease, complexing agent and aldehyde.
DC A96 D16 D22 E19 P31 P34 P43
IN BANSEMIR, K; DISCH, K; HACHMANN, K
PA (HENK) HENKEL KGAA; (HENK) HENKEL KG
CYC 22
PI EP 342499 A 19891123 (198947)* DE 7p
R: AT BE CH DE ES FR GB GR IT LI LU NL SE
DE 3816734 A 19891130 (198949)
PT 90564 A 19891130 (198951)
NO 8901958 A 19891211 (199004)
DK 8902331 A 19891118 (199005)
BR 8902274 A 19900109 (199007)
JP 02019159 A 19900123 (199009)
FI 8902343 A 19891118 (199010)
US 5234832 A 19930810 (199333) 5p
EP 342499 B1 19940119 (199403) DE 9p
R: AT BE CH DE ES FR GB GR IT LI LU NL SE
NO 174241 B 19931227 (199405)
DE 58906733 G 19940303 (199410)
CA 1328726 C 19940426 (199422)
DK 169277 B 19941003 (199438)
ES 2061780 T3 19941216 (199505)
FI 95205 B 19950929 (199544)
JP 2758204 B2 19980528 (199826) 5p
KR 9704585 B1 19970329 (199938)
ADT EP 342499 A EP 1989-108379 19890512; DE 3816734 A DE 1988-3816734 19880517; JP 02019159 A JP 1989-124115 19890517; US 5234832 A US 1989-353291 19890517; EP 342499 B1 EP 1989-108379 19890510; NO 174241 B NO 1989-1958 19890516; DE 58906733 G DE 1989-506733 19890510, EP 1989-108379 19890510; CA 1328726 C CA 1989-599808 19890516; DK 169277 B DK 1989-2331 19890512; ES 2061780 T3 EP 1989-108379 19890510; FI 95205 B FI 1989-2343 19890516; JP 2758204 B2 JP 1989-124115 19890517; KR 9704585 B1 KR 1989-6593 19890517
FDT NO 174241 B Previous Publ. NO 8901958; DE 58906733 G Based on EP 342499; DK 169277 B Previous Publ. DK 8902331; ES 2061780 T3 Based on EP 342499; FI 95205 B Previous Publ. FI 8902343; JP 2758204 B2 Previous Publ. JP 02019159
PRAI DE 1988-3816734 19880517
AB EP 342499 A UPAB: 19930923

Cleaning and disinfection of heat- and corrosion-sensitive medical devices, esp. endoscopes, is effected by contacting the surface of the device with a disinfectant/detergent soln., heating the soln. at 55-65 deg. C for 1-15 min., removing the soln., rinsing the surface at least twice with water, and drying with sterilised air at 40-60 deg. C.

The soln. contains a low-foam nonionic surfactant, a **proteolytic enzyme**, a complexing agent, and an aldehyde selected from HCHO and 2-8C aliphatic dialdehydes, and has a pH of 6-8.

The water used in the soln. and for rinsing has a hardness of 3-8 deg. D. The water used in at least the last rinsing step is heated to 55-65 deg. C. ADVANTAGE - The process provides acceptable cleaning and disinfection in short treatment times, can be applied repeatedly without damaging glass fibre endoscopes, and is readily automated.
0/0

L18 ANSWER 11 OF 12 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 1984-176802 [28] WPIDS
DNC C1984-074639
TI Detergent compsn. for pre-**sterilisation** of **medical instruments** - contains **enzymatic** preparation contg. seven **proteolytic enzymes**.
DC A97 D16 D22 D25 P34
IN ALESHINA, Z P; ALEXEEVA, M I; ANTON, A G; BELINSKY, A L; FEDOROVA, L G; GREBESHOVA, R N; LUPOVA, L M
PA (BIOU) BIOTECH RES INST
CYC 3
PI US 4456544 A 19840626 (198428)* 7p
DE 3328882 A 19850228 (198510)
JP 60049098 A 19850318 (198517)
JP 61032360 B 19860726 (198634)
DE 3328882 C 19890503 (198918)
ADT US 4456544 A US 1983-520813 19830805; DE 3328882 A DE 1983-3328882 19830810; JP 60049098 A JP 1983-153359 19830824
PRAI US 1983-520813 19830805
AB US 4456544 A UPAB: 19930925
Compsn. (I) comprises (in wt.%) 30-35 Na phosphate, 20-25 Na silicate, 19-22 Na carbonate, 4-6 anionic surfactant (II), 2-4 soap (comprising Na salts of fatty acids), 0.5-2 an enzyme compsn. (III), and the balance Na sulphate.
(III) comprises (in wt.%): 30-60 alkaline protease, 27-45 neutral protease, 0.01-5 elastase, 0.001-4 collagenase, 0.0001-0.011 leucinaminopeptidase, 0.04-0.15 carboxypeptidase, 0.002-1.5 fibrinolytic enzyme, 0.5-2 lipase, and the balance amylase.
ADVANTAGE - (I) ensures elimination of all protein and fat contamination from medical instruments and equipment without causing corrosion, using either manual or machine washing at 40-50 deg.C.
0/0

L18 ANSWER 12 OF 12 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 1978-55168A [31] WPIDS
TI Sterilisation of articles by microwave irradiation - using a vertical waveguide of dielectric material for feeding energy from a generator.
DC D14 D22
IN HAMID, M
PA (MIND) CANADA MIN NAT DEFENCE
CYC 1
PI CA 1034734 A 19780718 (197831)*
PRAI CA 1976-252899 19760519
AB CA 1034734 A UPAB: 19930901
Apparatus for the biological treatment of a flowable material includes a vertical waveguide of dielectric material surrounded by a chamber for receiving the material. Microwave energy is guided from a generator to the waveguide which is designed to allow leakage of the energy into the chamber. A hot gas supply duct communicates with the interior of the waveguide and the chamber.
Method is useful for **sterilisation** and destruction of anti-tripsin **enzyme** in foodstuffs, **sterilisation** of canned foods and **surgical instruments**.

Sterilisation is faster and more economical than using hot air or infra-red **treatment**. Anti-tripsyn **enzyme** is destroyed at a lower temp. using microwave energy.

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=> d his'
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ENTER DISPLAY FORMAT (STD):ebd
'EBD' IS NOT A VALID FORMAT FOR FILE 'WPIDS'
ENTER DISPLAY FORMAT (STD):end
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=> d his

     (FILE 'CAPLUS' ENTERED AT 11:31:34 ON 20 OCT 2003)
               DEL HIS Y

     FILE 'REGISTRY' ENTERED AT 11:33:42 ON 20 OCT 2003
               E KERATINASE/CN
L1             1 S E3

     FILE 'HCAPLUS' ENTERED AT 11:34:02 ON 20 OCT 2003
L2           238 S L1
L3           246 S L2 OR KERATINASE
L4         23581 S  MEDICAL GOOD# OR SURGICAL (L) INSTRUMENT?
L5             2 S L3 AND L4
L6          6074 S CUTLERY OR UTENSIL# OR (LAB OR LABORATORY ) (L) (WARE OR EQUI
L7             1 S L6 AND L3
L8        110283 S CABLE OR CENTRIFUG? OR CONTAINER? OR KNIVE? OR PUNCH? OR SAW#
L9             1 S L8 AND L3
L10            2 S L5 OR L7 OR L9
L11        89655 S STERILIZ? OR DISINFECT?
L12       104617 S HEATING
L13       193702 S L11  OR L12
L14         2741 S L13 (L) (L4 OR L6 OR L8)
L15            2 S L14 AND L3
L16            0 S ENZYMATIC (L) L14
L17          660 S ENZYM? (L) L13
L18          269 S ENZYMIC AND L13
L19       138213 S L4 OR L6 OR L8
L20         1840 S L19 (L) L11
L21            2 S L20 AND L3
L22           22 S L20 AND (ENZYM?)
L23        41208 S ENZYM? (L) (TREAT? OR DEGRA? OR HYDROL?)
L24            4 S L22 AND L23
L25            5 S L24 OR L21 OR L15
L26            2 S PROTEOLY? (L) L20
L27            6 S L25 OR L26
L28          926 S L19 (L) HEATING
L29            1 S L28 AND L3
L30        63886 S L23 OR PROTEOLY?
L31            2 S L30 AND L28
L32            7 S L31 OR L29 OR L27
L33       149369 S PROTEINASE OR TRYPSIN? OR CHYMOTYP? OR PEPSIN? OR CHYMOSIN? O
L34           15 S L33 AND  L20
L35        93482 S L33 NOT COLLAGEN#
L36        95121 S L35 OR COLLAGENASE?
L37            7 S L36 AND L20
L38        18620 S ENDOPEPTIDAS? OR PEPTIDASE?  OR THERMOLYSIN? OR BACILLOLYSIN?
L39            4 S L38 AND L20
L40        10440 S CARBONYL HYDROLASE? OR PAPAIN OR PANCREATIN OR STREPTOKINASE?
L41            4 S L20 AND L40
L42           10 S L41 OR L39 OR L37

     FILE 'REGISTRY' ENTERED AT 12:15:20 ON 20 OCT 2003

     FILE 'HCAPLUS' ENTERED AT 12:15:24 ON 20 OCT 2003

=> ]\d cost
]\D IS NOT A RECOGNIZED COMMAND
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d his

     (FILE 'WPIDS' ENTERED AT 12:17:34 ON 20 OCT 2003)
               DEL HIS

     FILE 'STNGUIDE' ENTERED AT 12:18:09 ON 20 OCT 2003

     FILE 'WPIDS' ENTERED AT 12:24:39 ON 20 OCT 2003
L1        561019 S HEATING OR STERILI?
L2         19638 S (MEDICAL OR SURGICAL) (2A) (GOOD# OR INSTRUMENT# OR APPARAT?
L3          2107 S L1 (L) L2
L4            54 S KERATINASE
L5             1 S L3 AND L4
L6          2624 S PROTEOLY? (4A) ENZYM?
L7             5 S L3 AND L6
L8           413 S BACILLUS LICHEN?
L9             2 S L8 AND L3
L10          491 S SUBTILISIN? OR CARBONYL (2A) HYDROLAS?
L11            1 S L10 AND L3
L12            6 S L5 OR L7 OR L9 OR L11
L13        22957 S ENZYM? (S) (DEGRA? OR HYDROLY? OR TREAT?)
L14            9 S L3 AND L13
L15           12 S L14 OR L12
L16          329 S HEAT? (S) (ENHANCE? OR INCREASE?) (S) (PROTEOLY? OR ENZYM?)
L17            1 S L3 AND L16
L18           12 S L15 OR L17

     FILE 'WPIDS' ENTERED AT 12:32:10 ON 20 OCT 2003

=> d cost
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
CONNECT CHARGES                                  [redacted]
NETWORK CHARGES                                  [redacted]
DISPLAY CHARGES                                  [redacted]
                                                 -------  -------
FULL ESTIMATED COST                              [redacted]

IN FILE 'WPIDS' AT 12:32:39 ON 20 OCT 2003


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